

Remarks:

Applicants appreciatively acknowledge the Examiner's confirmation of receipt of Applicants' claim for priority and certified priority document under 35 U.S.C. § 119(a)-(d).

Reconsideration of the application is respectfully requested.

Claims 1 - 21 are presently pending in the application.

Claims 1 and 14 have been amended to remove a clear clerical error. As it is believed that the claims were patentable over the cited art in their original form, the claims have not been amended to overcome the references.

In item 1 of the above-identified Office Action, claims 1 - 5, 12 - 16 and 21 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U. S. Patent No. 5,677,093 to Delabastita et al ("**DELABASTITA**") in view of U. S. Patent No. 5,946,454 to Shu et al ("**SHU**"). In item 2 of the Office Action, claims 6 - 11 and 17 - 20 were rejected under 35 U.S.C. § 103(a) as allegedly being obvious over **DELABASTITA** in view of **SHU**, and further in view of U. S. Patent No. 6,724,498 to Shimazaki ("**SHIMAZAKI**").

Applicants respectfully traverse the above rejections.

Applic. No. 10/811,475
Response Dated January 25, 2008
Responsive to Office Action of September 25, 2007

More particularly, Applicants' independent claims 1 and 14 recite, among other limitations:

quantizing **the binary image data** with n bits;
(emphasis added by Applicants)

As such, Applicants' claims require, among other limitations of Applicants' claims, other things, existing binary image data (i.e., "**the binary image data**"). As is understood in the art, binary image data is image data consisting only of two (i.e., "binary") values, for example, zero and one. Such binary image data is found in a so-called bitmap. Such a bitmap is usually obtained through a screening method in a raster image processor (RIP).

The **DELABASTITA** reference discloses a screening method. More particularly, as pointed out in col. 1 of **DELABASTITA**, lines 7 - 10, and in lines 18 - 19, **DELABASTITA** relates to a method for generating a screened reproduction of a contone image by means of frequency modulation of the original, in order to reproduce images having continues tones, using a half toning or screening technique. Col. 6 of **DELABASTITA**, lines 56 - 58, disclose that, for performing a frequency modulation screening method usable for the invention of **DELABASTITA**, a continuous tone signal produced by the scanner must be transformed into

Applic. No. 10/811,475
Response Dated January 25, 2008
Responsive to Office Action of September 25, 2007

binary values. This teaching of **DELABASTITA** is quite opposite to Applicants' invention of claim 1 and 14.

More particularly, Applicants' invention of claims 1 and 14 require, among other limitations, quantizing the binary image data with n bits. Thus, in Applicants' claimed invention, it is necessary to deal with already existing binary image data for correcting the gray value of that binary image data, but not transforming a continuous tone signal produced by the scanner into binary values, as disclosed by **DELABASTITA**.

Therefore, among other limitations of Applicants' claims, **DELABASTITA** fails to teach or suggest "quantizing the binary image data with n bits", as required by Applicants' claims.

Additionally, Applicants' claim 1 requires, among other limitations:

obtaining corrected quantized image data from the filtered image data with a threshold value operation.

Similarly, Applicants' independent claim 14 requires, among other limitations:

performing a threshold value operation to obtain corrected quantized image data from the filtered image data.

Applic. No. 10/811,475
Response Dated January 25, 2008
Responsive to Office Action of September 25, 2007

However, among other limitations of Applicants' claims, **DELABASTITA** does not teach or suggest obtaining corrected quantized image data from the filtered image data with a threshold value operation. Rather, as can be seen from columns 7 - 9 of **DELABASTITA**, Fig. 5 of **DELABASTITA** deals with the frequency modulation screening of **DELABASTITA** (i.e., by error diffusion). This conversion of a contone pixel value into a halftone pixel value may be based on a thresholding operation, for example, if the contone value at point (i, j) is below a value of 127 a value "0" is stored in the halftone memory, otherwise a "1" is stored. See, for example, col. 7 of **DELABASTITA**, lines 24 - 29 (referred to on page 2 of the Office Action). In **DELABASTITA**, with the above-discussed thresholding operation, a frequency modulation screening is performed. In this way, in **DELABASTITA**, a special frequency modulation method is described which converts a contone pixel value into a halftone pixel value using that thresholding operation.

However, among other limitations of Applicants' claims, **DELABASTITA** fails to teach or suggest correcting quantized image data from a filtered data with a threshold value. First, **DELABASTITA** does not disclose a method for correcting any image data, since **DELABASTITA** only discloses a screening method. A gray value correction cannot be performed using the

Applic. No. 10/811,475
Response Dated January 25, 2008
Responsive to Office Action of September 25, 2007

screening method of DELABASTITA. Rather, **DELABASTITA** merely discloses a threshold value operations and the use of binary image data.

The same can be said of the **SHU** reference, cited in the Office Action in combination with **DELABASTITA** for allegedly disclosing "filtering". For example, **SHU** also fails to teach or suggest correcting quantized image data from a filtered data with a threshold value, since **SHU** merely discloses that filtering during half toning is known in the art. However, neither **SHU**, nor **DELABASTITA**, teach or suggest, among other limitations of Applicants' claims, quantizing already existing binary image data with n bits, and then filtering that quantized image data. Rather, **SHU** merely proposes using a low-pass filter for smoothing of edges, but not quantizing already existing binary image data with n bits, prior to filtering.

Additionally, since **DELABASTITA** does not show any edges in any form, the teaching in the **SHU** reference of smoothing edges using a low-pass filter is not capable of being applied to the teachings of **DELABASTITA**. In other words, there is nothing in **DELABASTITA** that can even be smoothed with the low-pass filter of **SHU**, in the fashion taught by **SHU**.

Applic. No. 10/811,475
Response Dated January 25, 2008
Responsive to Office Action of September 26, 2007

Thus, the combination of **DELABASTITA** and **SHU** merely provides a teaching to a person of ordinary skill in this art on how to perform a frequency modulation screening of a continuous tone image, using a low-pass filter for smoothing the edges of the screened halftone image. But since the halftone image of **DELABASTITA** is achieved using frequency modulation, there would be no need, and thus no suggestion to someone of skill in this art, to smooth the edges with a low-pass filter, since it is a characteristic of such frequency modulation that there aren't any sharp edges of the raster points.

As such, the combination of **DELABASTITA** and **SHU** fails to teach or suggest all limitations of Applicants' claims. For the foregoing reasons, among others, Applicants' claims are believed to be patentable over the **DELABASTITA** and **SHU** references, whether taken alone, or in combination.

It is accordingly believed that none of the references, whether taken alone or in any combination, teach or suggest the features of claims 1 and 14. Claims 1 and 14 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1 or 14.

Applic. No. 10/811,475
Response Dated January 25, 2008
Responsive to Office Action of September 25, 2007

In view of the foregoing, reconsideration and allowance of claims 1 - 21 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

Additionally, please consider the present as a petition for a one (1) month extension of time, and please provide a one (1) month extension of time, to and including, January 25, 2008 to respond to the present Office Action.

The extension fee for response within a period of one (1) month pursuant to Section 1.136(a) in the amount of \$120.00 in accordance with Section 1.17 is enclosed herewith.

Please provide any additional extensions of time that may be necessary and charge any other fees that might be due with respect to Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Stemer LLP, No. 12-1099.

Applic. No. 10/811,475
Response Dated January 25, 2008
Responsive to Office Action of September 25, 2007

Respectfully submitted,



For Applicants

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